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Gregory M. Zinkl, Ph.D.
Name of applicant, assignee or
Registered Representative

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06/18/02
Date of Signature

Our Case No. 10716/57

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Pennica et al.
Serial No. 09/816,653
Filing Date: March 23, 2001
For NOVEL HUMAN STRA6-LIKE PROTEIN AND NUCLEIC ACIDS ENCODING THE SAME

Examiner To be assigned
Group Art Unit No. 1641

REQUEST FOR CORRECTION OF FILING RECEIPT

Commissioner for Patents
Washington, D.C. 20231

Attention: Application Processing Division
Customer Correction Branch

Sir:

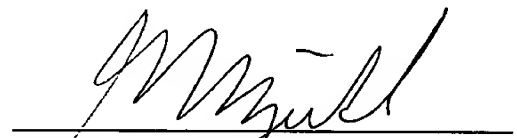
Applicant requests the issuance of a corrected filing receipt (copy enclosed) for the above-referenced patent application, and in support of this request respectfully states:

UNITED KINGDOM 0007333.8, listed under **Foreign Applicati ns** should not be listed on this filing receipt. This case is not related in any way to

the above-referenced patent application. We enclose a copy of the declaration as well as the first page of the application to show that the United Kingdom patent listed on the filing receipt is not related to this application. Please remove UNITED KINGDOM 0007333.8 from the filing receipt.

The Commissioner is hereby authorized to charge any fees required to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed.

Respectfully submitted,



Gregory M. Zinkl, Ph.D.
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Agent for Applicant

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UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/816,653	03/23/2001	1642	1670	10716-57/CURA233/GN1885R1	1	35	10

CONFIRMATION NO. 6857

CORRECTED FILING RECEIPT

OC000000007599481*

Paul E. Rauch, Ph.D.
BRINKS HOFER GILSON & LIONE
P. O. Box 10395
Chicago, IL 60610

Date Mailed: 03/07/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

Applicant(s)

Diane Pennica, Burlingame, CA;
Luca Rastelli, Guilford, CT;

Domestic Priority data as claimed by applicant

THIS APPLN CLAIMS BENEFIT OF 60/191,532 03/23/2000

Foreign Applications

* ~~UNITED KINGDOM 0007333.8 03/28/2000~~ SHOULD NOT BE LISTED

If Required, Foreign Filing License Granted 05/31/2001

Projected Publication Date: 05/30/2002

Non-Publication Request: No

Early Publication Request: No

Title

Novel human STRA6-like protein and nucleic acids encoding the same

Preliminary Class

424

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Title 35, Unit d States Cod , S cti n 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

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1642 Receipt

FILE COPY

TRANSMITTAL LETTER		Case No. 10716/57
Serial No. 09/816,653	Filing Date March 23, 2001	Examiner To be assigned	Group Art Unit 1642
Inventor(s) Pennica et al.		
Title of Invention NOVEL HUMAN STRAG-LIKE PROTEIN AND NUCLEIC ACIDS ENCODING THE SAME		

TO THE COMMISSIONER FOR PATENTS

Transmitted herewith is a Request for Correction of Filing Receipt; copy of filing receipt; copy of declaration; copy of first page of application and return postcard.

☐ Small entity status of this application under 37 CFR § 1.27 has been established by verified statement previously submitted.

☐ A verified statement to establish small entity status under 37 CFR §§ 1.9 and 1.27 is enclosed.

☐ Petition for a _____month extension of time.

☒ No additional fee is required.

☐ The fee has been calculated as shown below:

	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Small Entity Rate	Small Entity Add'l Fee	or	Other Than Small Entity Rate	Other Than Small Entity Add'l Fee
Total		Minus			x $9=			x $18=	
Indep.		Minus			x 42=			x $84=	10
First Presentation of Multiple Dep. Claim					+$140=			+ $280=	
					Total add'l fee	$		Total add'l fee	$

☐ Please charge Deposit Account No. 23-1925 (BRINKS HOFER GILSON & LIONE) in the amount of $_____. A duplicate copy of this sheet is enclosed.

☐ A check in the amount of $_____ to cover the filing fee is enclosed.

☒ The Commissioner is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 associated with this communication or credit any overpayment to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed.

☒ I hereby petition under 37 CFR § 1.136(a) for any extension of time required to ensure that this paper is timely filed. Please charge any associated fees which have not otherwise been paid to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Gregory M. Zinkl, Ph.D.
Registration No. 48,492
Agent for Applicant

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Document5

NOVEL HUMAN STRA6-LIKE PROTEIN AND NUCLEIC ACIDS ENCODING THE SAME

RELATED APPLICATIONS

This application claims priority to U.S. provisional application Serial No. 60/191,532 filed 03/23/2000, which is incorporated herein by reference in its entirety.

BACKGROUND

Wnt family members are cysteine-rich, glycosylated signaling proteins that mediate diverse developmental processes such as the control of cell proliferation, adhesion, cell polarity, and the establishment of cell fates. Components of the Wnt signaling pathway have been linked to tumorigenesis in familial and sporadic colon carcinomas, breast cancer, and melanoma. Experiments suggest that the adenomatous polyposis coli (APC) tumor suppressor gene also plays an important role in Wnt signaling by regulating beta-catenin levels. APC is phosphorylated by GSK-3beta, binds to beta-catenin and facilitates its degradation. Mutations in either APC or beta-catenin have been associated with colon carcinomas and melanomas, suggesting these mutations contribute to the development of these types of cancer, implicating the Wnt pathway in tumorigenesis.

Although much has been learned about the Wnt signaling pathway over the past several years, only a few of the transcriptionally activated downstream components activated by Wnt have been characterized. Those that have been described cannot account for all of the diverse functions attributed to Wnt signaling.

Because Wnt genes are critical to many developmental processes, and compononents of the Wnt signaling pathway have been linked to tumorigenesis (Pennica et al., 1998), genes that are differentially regulated due to aberrant Wnt expression, such as overexpression, represent attractive therapeutic targets to treat cancer. *In vivo*, Wnt expression leads to mammary tumors in transgenic mice (Tsukamoto et al., 1988). When Wnt-1 is overexpressed in mouse mammary epithelia, cells are partially transformed. Apical-basal polarity is lost, and the cells form multilayers (Brown et al., 1986; Diatchenko et al., 1996). In this *in vitro* model, genes that are differentially regulated by Wnt-1 overexpression, when compared to wild-type or non-transforming Wnt-4-expressing cells, represent candidate genes that are involved in tumorigenic processes.